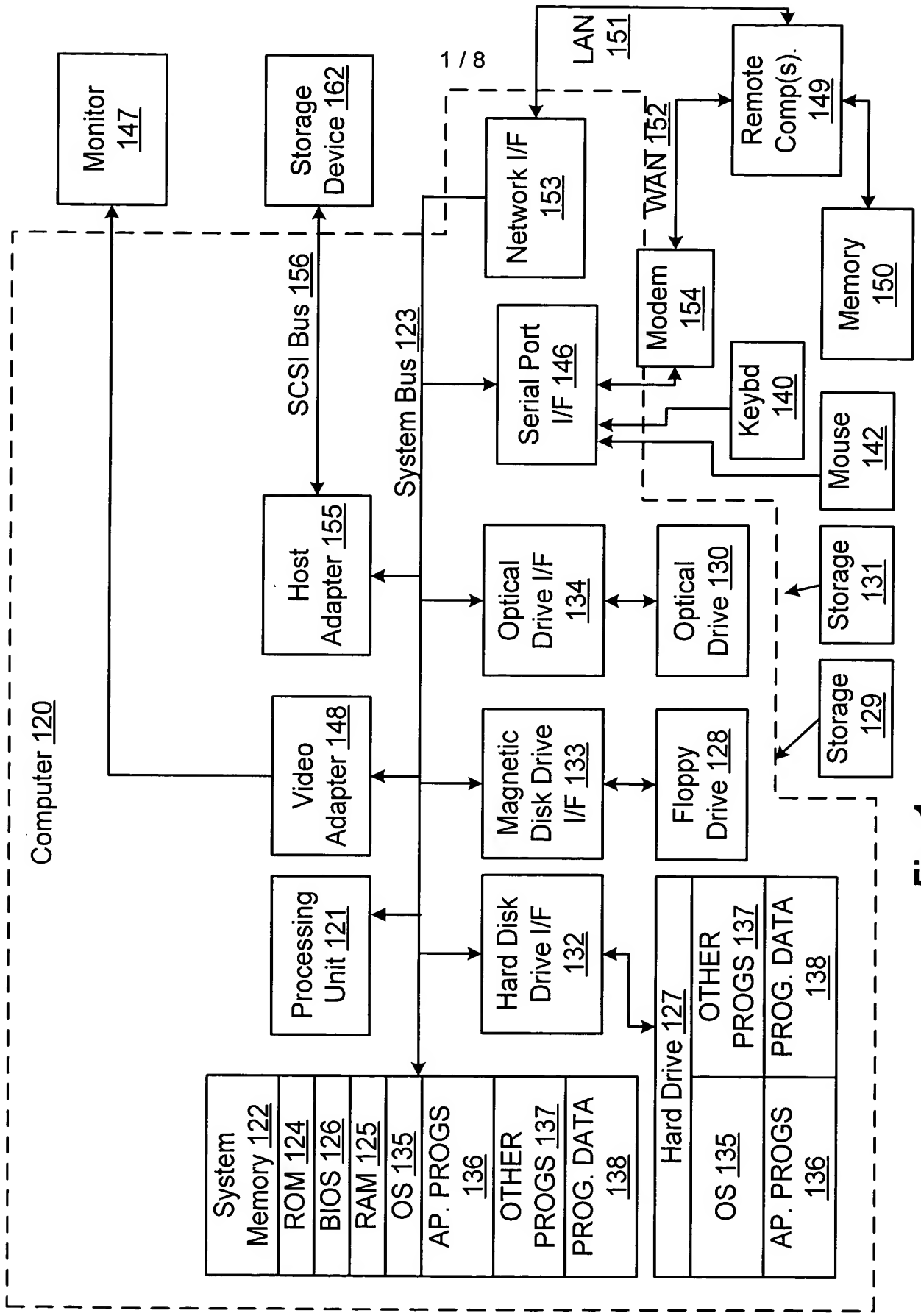
Computer 120
Monitor 147
Storage Device 162
SCSI Bus 156
System Bus 123
LAN 151
WAN 152
Network I/F 153
Remote Comp(s). 149
Memory 150
Modem 154
Serial Port I/F 146
Keybd 140
Mouse 142
Host Adapter 155
Optical Drive I/F 134
Optical Drive 130
Storage 131
Video Adapter 148
Magnetic Disk Drive I/F 133
Floppy Drive 128
Storage 129
Processing Unit 121
Hard Disk Drive I/F 132
System Memory 122
ROM 124
BIOS 126
RAM 125
OS 135
AP. PROGS 136
OTHER PROGS 137
PROG. DATA 138
Hard Drive 127
OS 135
AP. PROGS 136
OTHER PROGS 137
PROG. DATA 138

Fig. 1

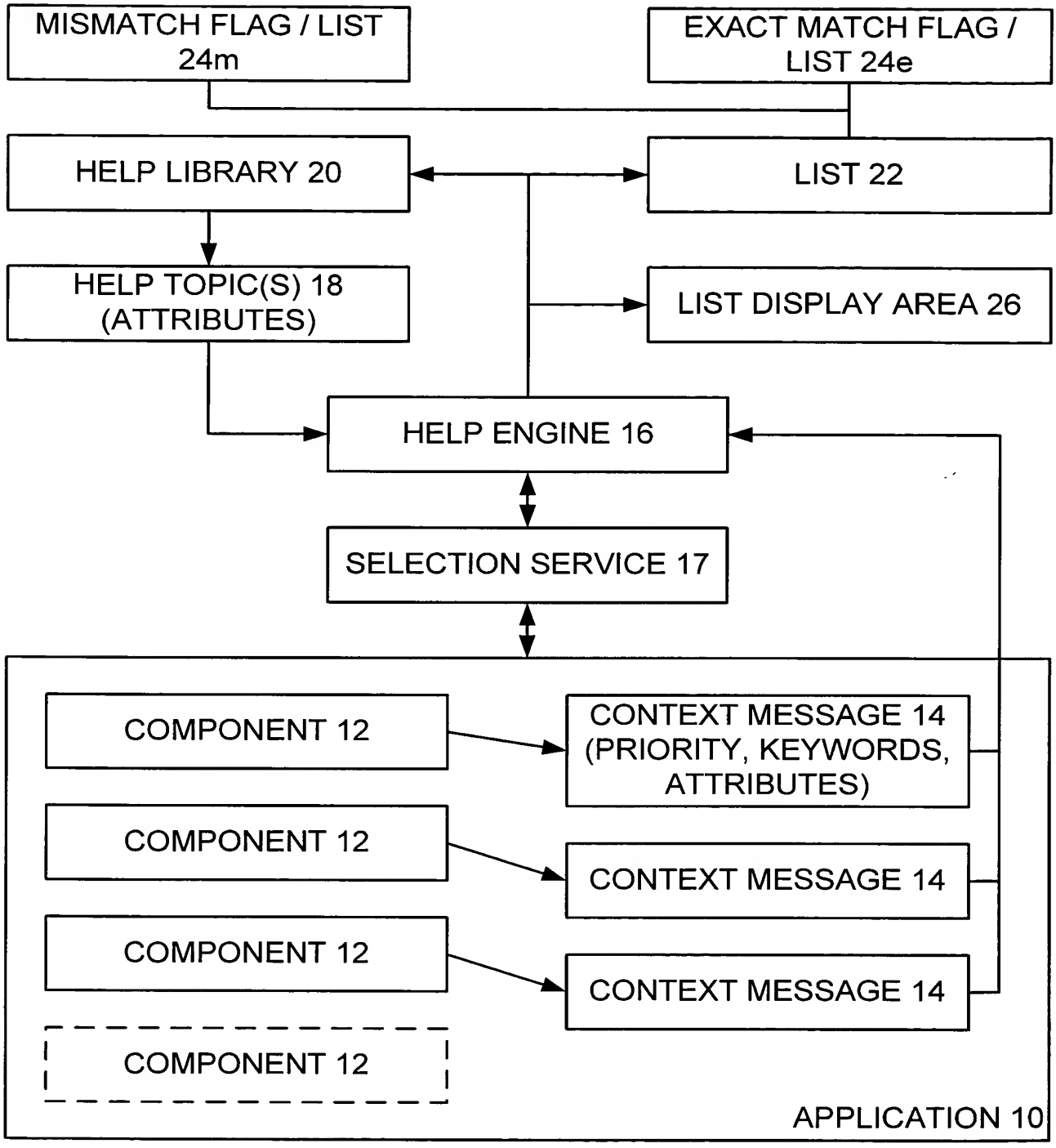
MISMATCH FLAG / LIST 24m
EXACT MATCH FLAG / LIST 24e
HELP LIBRARY 20
LIST 22
HELP TOPIC(S) 18 (ATTRIBUTES)
LIST DISPLAY AREA 26
HELP ENGINE 16
SELECTION SERVICE 17
COMPONENT 12
CONTEXT MESSAGE 14 (PRIORITY, KEYWORDS, ATTRIBUTES)
COMPONENT 12
CONTEXT MESSAGE 14
COMPONENT 12
CONTEXT MESSAGE 14
COMPONENT 12
APPLICATION 10

Fig. 2

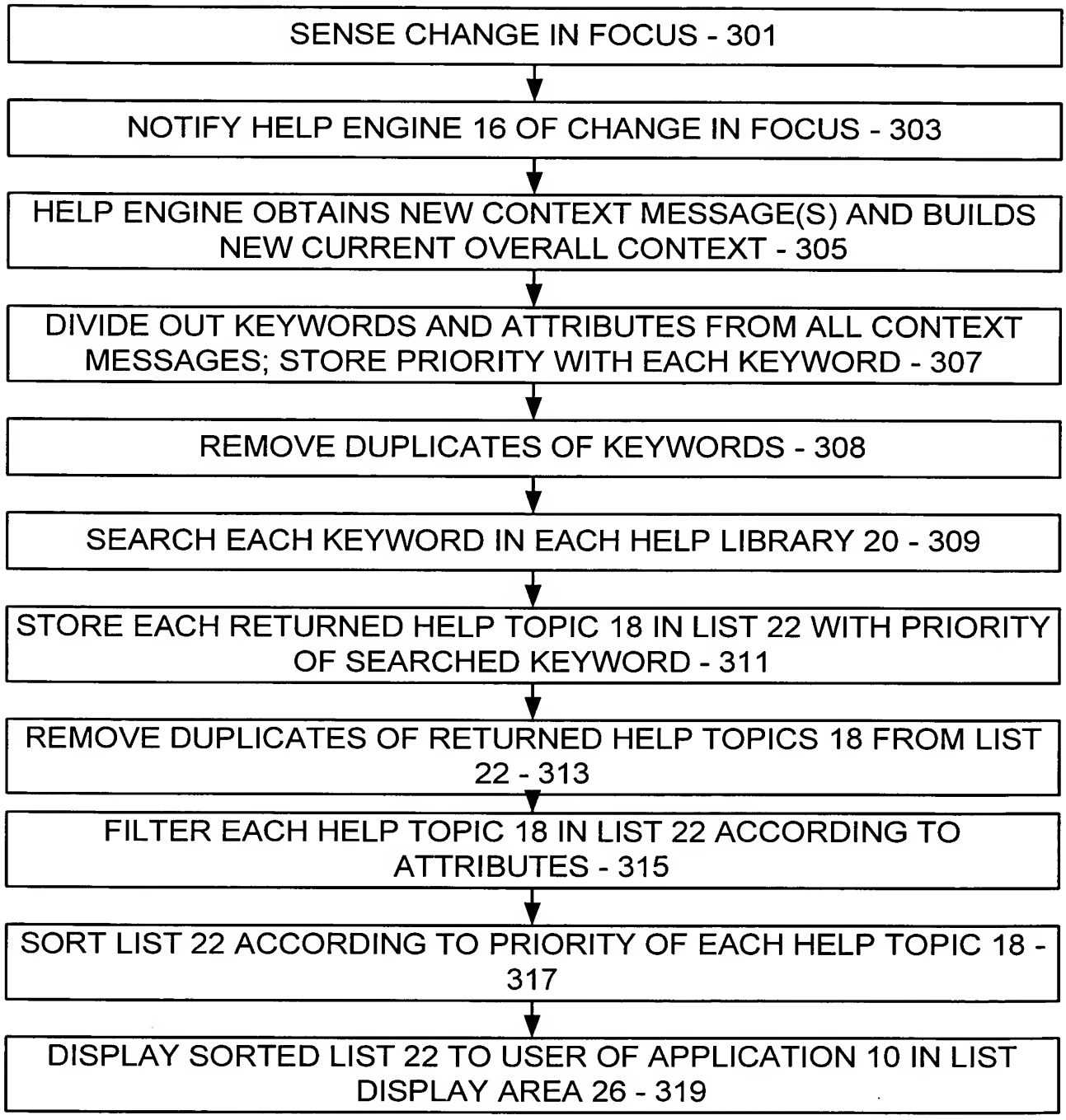
SENSE CHANGE IN FOCUS - 301
NOTIFY HELP ENGINE 16 OF CHANGE IN FOCUS - 303
HELP ENGINE OBTAINS NEW CONTEXT MESSAGE(S) AND BUILDS NEW CURRENT OVERALL CONTEXT - 305
DIVIDE OUT KEYWORDS AND ATTRIBUTES FROM ALL CONTEXT MESSAGES; STORE PRIORITY WITH EACH KEYWORD - 307
REMOVE DUPLICATES OF KEYWORDS - 308
SEARCH EACH KEYWORD IN EACH HELP LIBRARY 20 - 309
STORE EACH RETURNED HELP TOPIC 18 IN LIST 22 WITH PRIORITY OF SEARCHED KEYWORD - 311
REMOVE DUPLICATES OF RETURNED HELP TOPICS 18 FROM LIST 22 - 313
FILTER EACH HELP TOPIC 18 IN LIST 22 ACCORDING TO ATTRIBUTES - 315
SORT LIST 22 ACCORDING TO PRIORITY OF EACH HELP TOPIC 18 - 317
DISPLAY SORTED LIST 22 TO USER OF APPLICATION 10 IN LIST DISPLAY AREA 26 - 319

Fig. 3

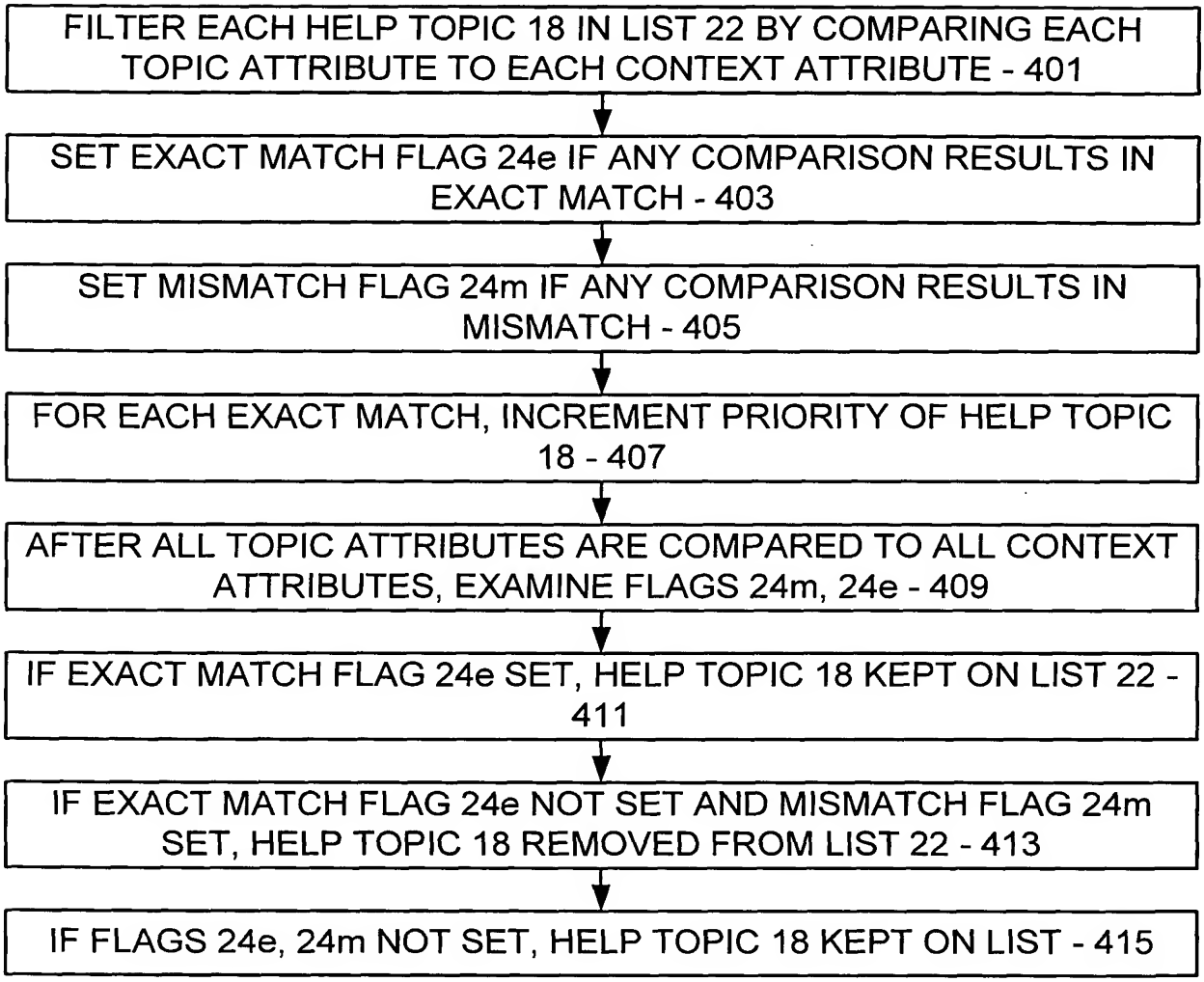
FILTER EACH HELP TOPIC 18 IN LIST 22 BY COMPARING EACH TOPIC ATTRIBUTE TO EACH CONTEXT ATTRIBUTE - 401
SET EXACT MATCH FLAG 24e IF ANY COMPARISON RESULTS IN EXACT MATCH - 403
SET MISMATCH FLAG 24m IF ANY COMPARISON RESULTS IN MISMATCH - 405
FOR EACH EXACT MATCH, INCREMENT PRIORITY OF HELP TOPIC 18 - 407
AFTER ALL TOPIC ATTRIBUTES ARE COMPARED TO ALL CONTEXT ATTRIBUTES, EXAMINE FLAGS 24m, 24e - 409
IF EXACT MATCH FLAG 24e SET, HELP TOPIC 18 KEPT ON LIST 22 - 411
IF EXACT MATCH FLAG 24e NOT SET AND MISMATCH FLAG 24m SET, HELP TOPIC 18 REMOVED FROM LIST 22 - 413
IF FLAGS 24e, 24m NOT SET, HELP TOPIC 18 KEPT ON LIST - 415

Fig. 4

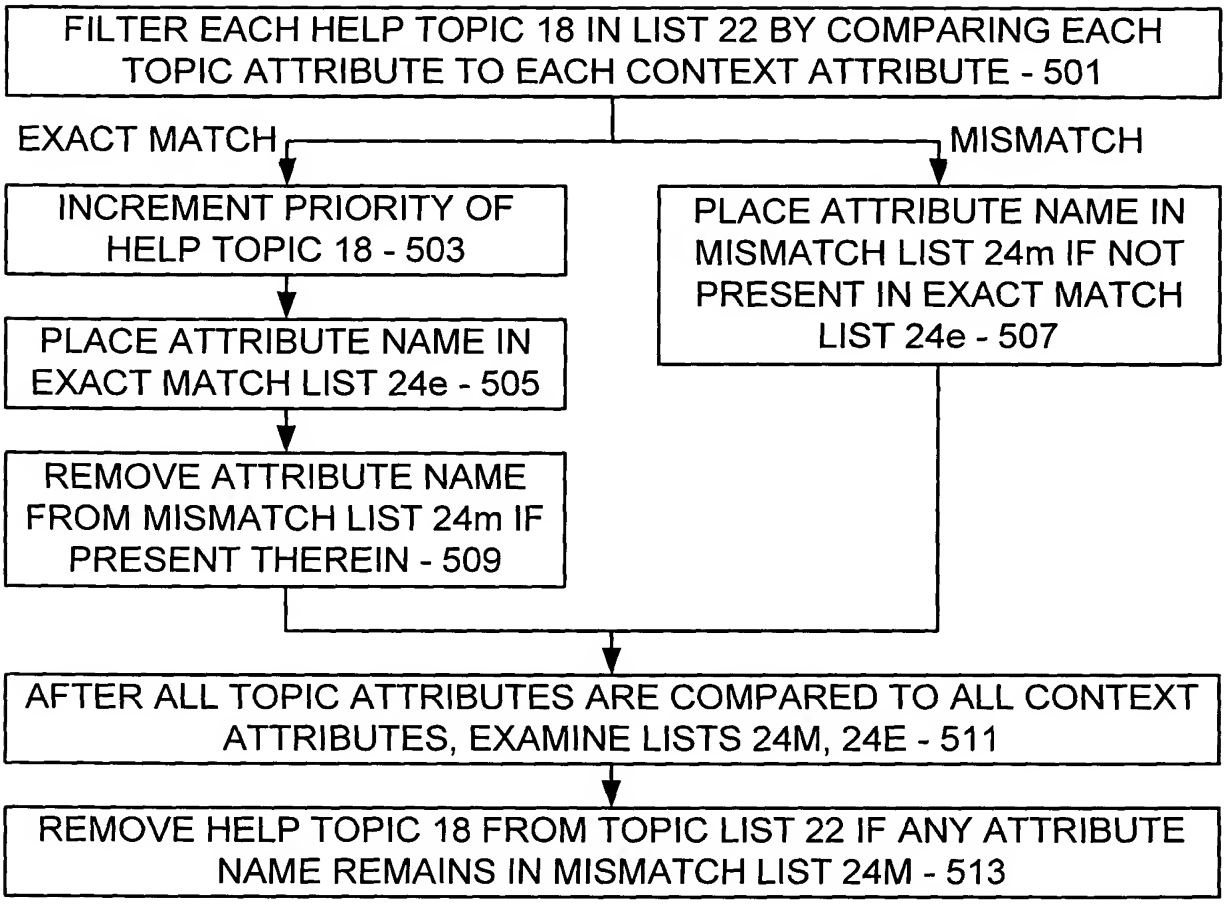
FILTER EACH HELP TOPIC 18 IN LIST 22 BY COMPARING EACH TOPIC ATTRIBUTE TO EACH CONTEXT ATTRIBUTE - 501
EXACT MATCH
MISMATCH
INCREMENT PRIORITY OF HELP TOPIC 18 - 503
PLACE ATTRIBUTE NAME IN EXACT MATCH LIST 24e - 505
REMOVE ATTRIBUTE NAME FROM MISMATCH LIST 24m IF PRESENT THEREIN - 509
PLACE ATTRIBUTE NAME IN MISMATCH LIST 24m IF NOT PRESENT IN EXACT MATCH LIST 24e - 507
AFTER ALL TOPIC ATTRIBUTES ARE COMPARED TO ALL CONTEXT ATTRIBUTES, EXAMINE LISTS 24M, 24E - 511
REMOVE HELP TOPIC 18 FROM TOPIC LIST 22 IF ANY ATTRIBUTE NAME REMAINS IN MISMATCH LIST 24M - 513

Fig. 5

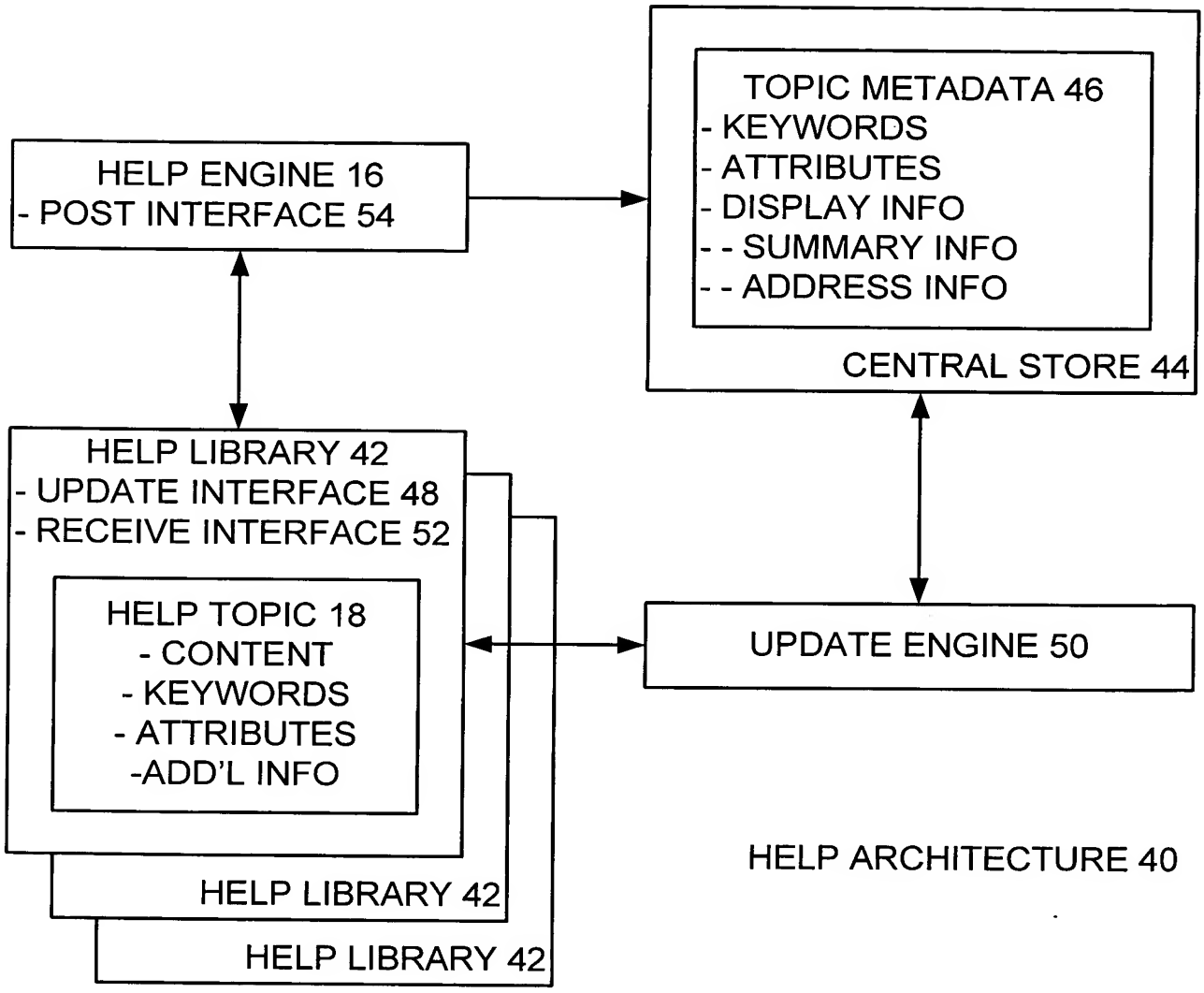
HELP ENGINE 16
- POST INTERFACE 54
TOPIC METADATA 46
- KEYWORDS
- ATTRIBUTES
- DISPLAY INFO
- - SUMMARY INFO
- - ADDRESS INFO
CENTRAL STORE 44
HELP LIBRARY 42
- UPDATE INTERFACE 48
- RECEIVE INTERFACE 52
HELP TOPIC 18
- CONTENT
- KEYWORDS
- ATTRIBUTES
-ADD'L INFO
UPDATE ENGINE 50
HELP LIBRARY 42
HELP LIBRARY 42
HELP ARCHITECTURE 40

Fig. 6

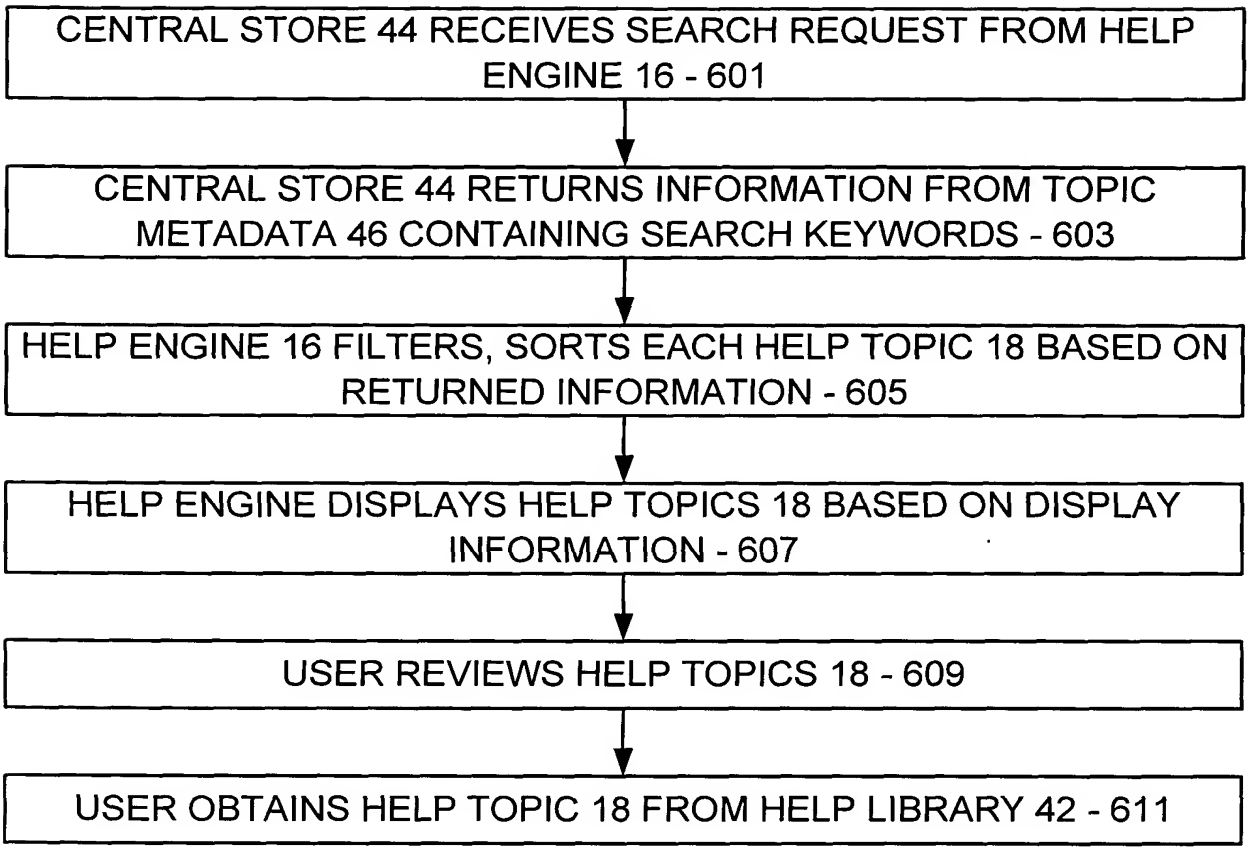
CENTRAL STORE 44 RECEIVES SEARCH REQUEST FROM HELP ENGINE 16 - 601
CENTRAL STORE 44 RETURNS INFORMATION FROM TOPIC METADATA 46 CONTAINING SEARCH KEYWORDS - 603
HELP ENGINE 16 FILTERS, SORTS EACH HELP TOPIC 18 BASED ON RETURNED INFORMATION - 605
HELP ENGINE DISPLAYS HELP TOPICS 18 BASED ON DISPLAY INFORMATION - 607
USER REVIEWS HELP TOPICS 18 - 609
USER OBTAINS HELP TOPIC 18 FROM HELP LIBRARY 42 - 611

Fig. 6A

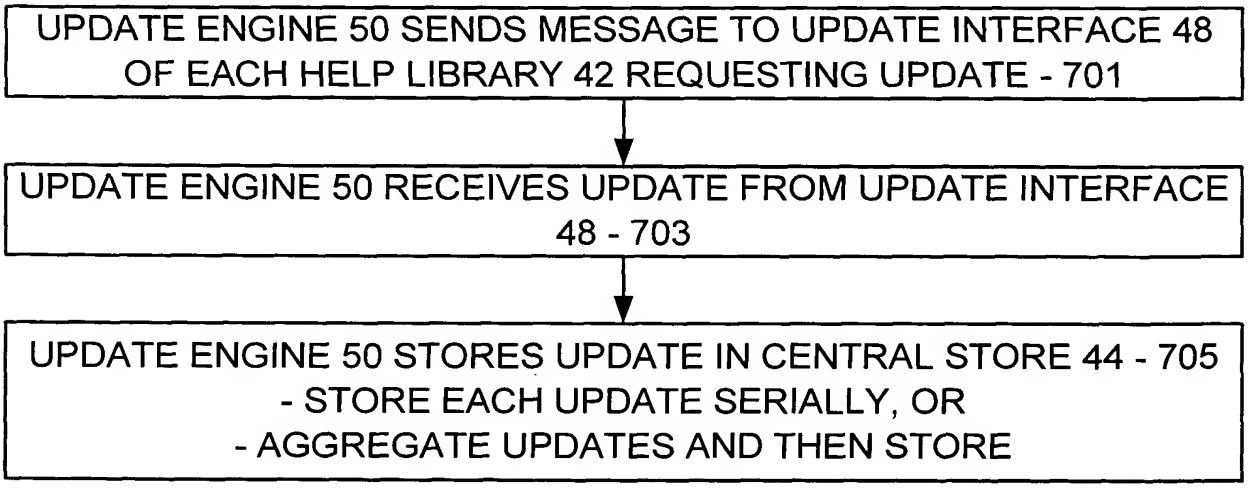
UPDATE ENGINE 50 SENDS MESSAGE TO UPDATE INTERFACE 48 OF EACH HELP LIBRARY 42 REQUESTING UPDATE - 701
UPDATE ENGINE 50 RECEIVES UPDATE FROM UPDATE INTERFACE 48 - 703
UPDATE ENGINE 50 STORES UPDATE IN CENTRAL STORE 44 - 705
- STORE EACH UPDATE SERIALLY, OR
- AGGREGATE UPDATES AND THEN STORE

Fig. 7

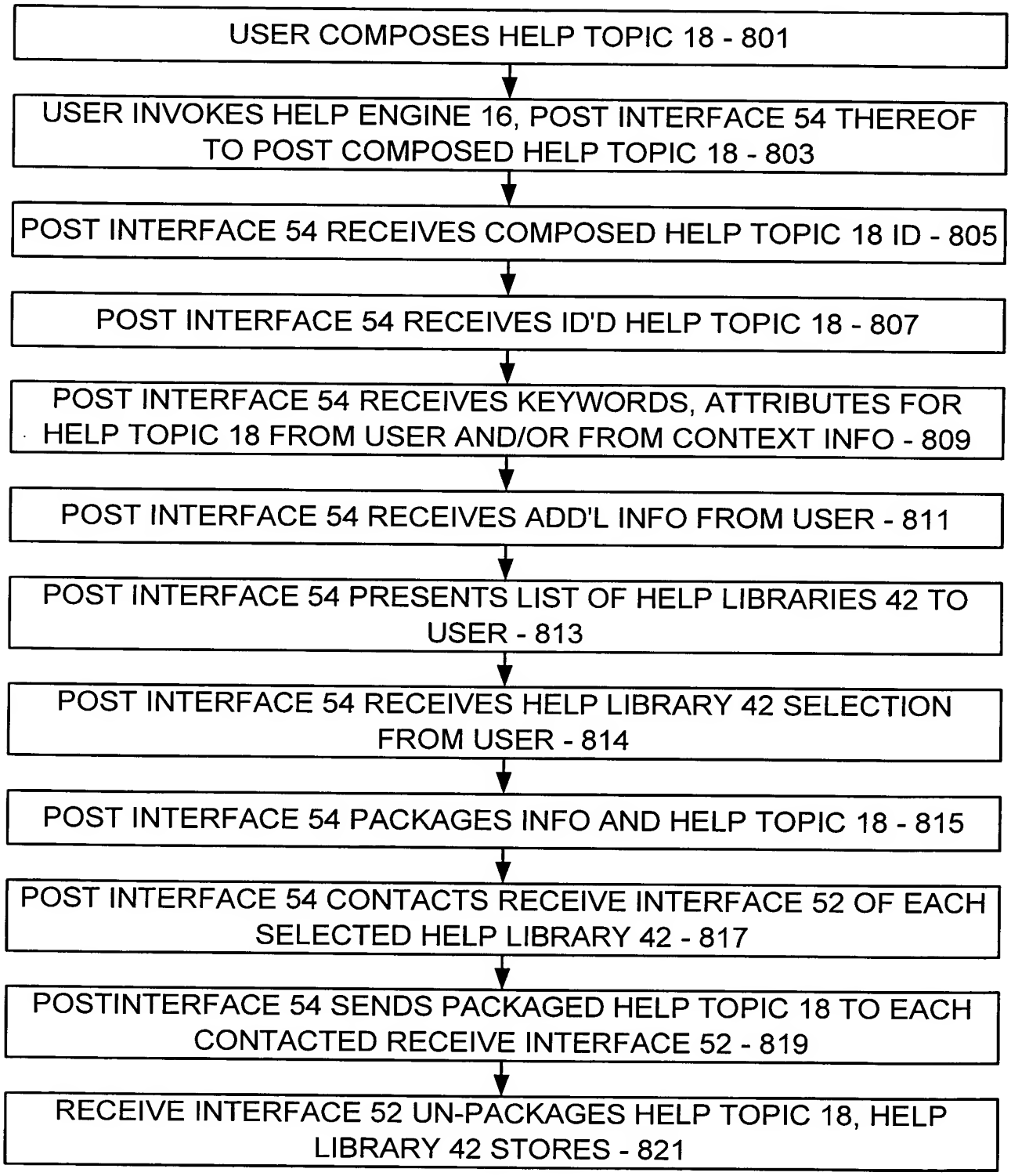
USER COMPOSES HELP TOPIC 18 - 801
USER INVOKES HELP ENGINE 16, POST INTERFACE 54 THEREOF TO POST COMPOSED HELP TOPIC 18 - 803
POST INTERFACE 54 RECEIVES COMPOSED HELP TOPIC 18 ID - 805
POST INTERFACE 54 RECEIVES ID'D HELP TOPIC 18 - 807
POST INTERFACE 54 RECEIVES KEYWORDS, ATTRIBUTES FOR HELP TOPIC 18 FROM USER AND/OR FROM CONTEXT INFO - 809
POST INTERFACE 54 RECEIVES ADD'L INFO FROM USER - 811
POST INTERFACE 54 PRESENTS LIST OF HELP LIBRARIES 42 TO USER - 813
POST INTERFACE 54 RECEIVES HELP LIBRARY 42 SELECTION FROM USER - 814
POST INTERFACE 54 PACKAGES INFO AND HELP TOPIC 18 - 815
POST INTERFACE 54 CONTACTS RECEIVE INTERFACE 52 OF EACH SELECTED HELP LIBRARY 42 - 817
POSTINTERFACE 54 SENDS PACKAGED HELP TOPIC 18 TO EACH CONTACTED RECEIVE INTERFACE 52 - 819
RECEIVE INTERFACE 52 UN-PACKAGES HELP TOPIC 18, HELP LIBRARY 42 STORES - 821

Fig. 8